CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-26.

- After this Amendment: Claims 1-26.

Non-Elected, Canceled, or Withdrawn claims: None.

Amended claims: 1-14 and 20-25.

New claims: None.

Claims:

1. **(Currently Amended)** A ~~processor-readable medium~~ <u>computer storage media</u> having processor-executable instructions that, when executed by a processor, performs a method comprising:

receiving<u>, by head-end equipment from a content provider,</u> a digital television (DTV) application and its associated metadata<u>, wherein the receiving is facilitated by an asset definition interface</u>;

generating<u>, by the head-end equipment,</u> a data grouping having application signaling information, wherein the information is based upon the metadata associated with the DTV application;

sending<u>, by the head-end equipment,</u> a transmission to a DTV receiving unit, wherein such transmission comprises the data grouping<u>, whereby the application signaling information is used by the DTV receiving unit to discover and launch the DTV application</u>.

2. **(Currently Amended)** A ~~medium~~ <u>computer storage media</u> as recited in claim 1, wherein the method further comprises storing the DTV application and its associated metadata.

3. **(Currently Amended)** A ~~medium~~ computer storage media as recited in claim 1, wherein the method further comprises constructing and formatting a DTV data service transmission which comprises the DTV application.

4. **(Currently Amended)** A ~~medium~~ computer storage media as recited in claim 1, wherein the method further comprises generating a content referencing identifier for the DTV application.

5. **(Currently Amended)** A ~~medium~~ computer storage media as recited in claim 1, wherein the associated metadata comprises a data structure embodied on ~~a processor-readable medium~~ the computer storage media, the structure having fields comprising:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

6. **(Currently Amended)** A ~~medium~~ <u>computer storage media</u> as recited in claim 1, wherein the associated metadata comprises a data structure embodied on ~~a processor-readable medium~~ <u>the computer storage media</u>, the structure having fields consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

7. **(Currently Amended)** A ~~medium~~ <u>computer storage media</u> as recited in claim 1, wherein the associated metadata comprises a data structure embodied on ~~a processor-readable medium~~ <u>the computer storage media</u>, the structure having one or more fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

8. **(Currently Amended)** A ~~medium~~ <u>computer storage media</u> as recited in claim 1, wherein the associated metadata comprises a data structure having fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a profile field for indicating a minimum profile of a system on which the DTV application will execute;

a visibility field for indicating the degree of control a user has over the DTV application;

a permission field for denoting "sandbox" security permission of the DTV application; and

a rating field for indicating a rating of the DTV application.

9.   (Currently Amended) A ~~processor-readable medium~~ <u>computer storage media</u> having processor-executable instructions that, when executed by a processor, performs a method comprising:

receiving<u>, by a digital television unit from head-end equipment,</u> a transmission which includes application signal information about a digital television (DTV) application, wherein ~~such information is based on~~ metadata associated with the DTV application <u>facilitates management and generation of the application signal information within the head-end equipment</u>;

presenting a user interface (UI) configured to inform a user about the DTV application, wherein contents of the UI are based upon the received application signal information.

10.   (Currently Amended) A ~~medium~~ <u>computer storage media</u> as recited in claim 9, wherein the method further comprises receiving user input via the UI.

11.   (Currently Amended) A ~~medium~~ <u>computer storage media</u> as recited in claim 9, wherein the application signal information comprises a data structure embodied on a processor-readable medium, having fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

12. **(Currently Amended)** A <u>computer storage media encoded with a</u> data structure for metadata associated with a digital television (DTV) application <u>received by head-end equipment from a content provider</u>, the structure ~~being embodied on a processor-readable medium~~ having fields comprising:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application<u>, wherein the metadata drives data insertion equipment at the head-end equipment</u>.

13. (Currently Amended) A <u>computer storage media encoded with a</u> data structure for metadata associated with a digital television (DTV) application <u>received by head-end equipment from a content provider</u>, the structure ~~being embodied on a processor-readable medium~~ having fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a profile field for indicating a minimum profile of a system on which the DTV application will execute;

a visibility field for indicating the degree of control a user has over the DTV application;

a permission field for denoting "sandbox" security permission of the DTV application; and

a rating field for indicating a rating of the DTV application<u>, wherein the metadata drives data insertion equipment at the head-end equipment</u>.

14. **(Currently Amended)** A method for managing digital television (DTV) application signaling, the method comprising:

receiving, by head-end equipment from a content provider, a DTV application and its associated metadata, wherein the metadata drives data insertion equipment at the head-end equipment;

constructing and formatting, by the head-end equipment, a DTV data service transmission which comprises the DTV application;

generating, by the head-end equipment, a data grouping having application signaling information, wherein the information is based upon the metadata associated with the DTV application;

application-signaling, by the head-end equipment, a DTV receiving unit via a transmission comprising the data grouping.

15. **(Original)** A method as recited in claim 14, further comprising provisioning transmission bandwidth to transmit periodically the application signaling information built for the metadata.

16. **(Original)** A method as recited in claim 14, wherein the metadata is part of an Extended Asset Definition Interface.

17. **(Original)** A method as recited in claim 14, further comprising generating a content referencing identifier for the DTV application.

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18. **(Original)** A method as recited in claim 14, wherein the associated metadata comprises a data structure embodied on a processor-readable medium, the structure having fields comprising:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

19. **(Original)** A method as recited in claim 14, wherein the associated metadata comprises a data structure embodied on a processor-readable medium, the structure having one or more fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

20.   (Currently Amended) A digital television (DTV) application management system comprising:

a receiving means for receiving a digital television (DTV) application and its associated metadata by head-end equipment from a content provider;

a generating means, implemented in the head-end equipment, for receiving generating a data grouping having application signaling information, wherein the information is based upon the metadata associated with the DTV application;

a sending means, implemented in the head-end equipment, for sending a transmission to a DTV receiving unit, wherein such transmission comprises the data grouping.

21.   (Currently Amended) A system as recited in claim 20, wherein the associated metadata comprises a data structure embodied on a processor-readable medium computer storage media, the structure having one or more fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

22. **(Currently Amended)** A digital television (DTV) application management system <u>implemented in head-end equipment</u> comprising:

an asset receiver configured to receive a digital television (DTV) application and its associated metadata;

an application signaling generator configured to generate a data grouping having application signaling information, wherein the information is based upon the metadata associated with the DTV application;

a transmitter configured to send a transmission to a DTV receiving unit, wherein such transmission comprises the data grouping.

23. **(Currently Amended)** A system as recited in claim 22, wherein the associated metadata comprises a data structure embodied on a ~~processor-readable medium~~ <u>computer storage media</u>, the structure having fields comprising:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

24. **(Currently Amended)** A system as recited in claim 22, wherein the associated metadata comprises a data structure embodied on a ~~processor-readable medium~~ computer storage media, the structure having fields consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

25. **(Currently Amended)** A system as recited in claim 22, wherein the associated metadata comprises a data structure embodied on a ~~processor-readable medium~~ computer storage media, the structure having one or more fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a visibility field for indicating the degree of control a user has over the DTV application; and

a rating field for indicating a rating of the DTV application.

26. **(Original)** A system as recited in claim 22, wherein the associated metadata comprises a data structure having fields selected from a group consisting of:

an application identifier field for identifying the DTV application;

an originator identifier field for identifying the originator of the DTV application;

an application-type field for indicating a type of the DTV application;

a profile field for indicating a minimum profile of a system on which the DTV application will execute;

a visibility field for indicating the degree of control a user has over the DTV application;

a permission field for denoting "sandbox" security permission of the DTV application; and

a rating field for indicating a rating of the DTV application.